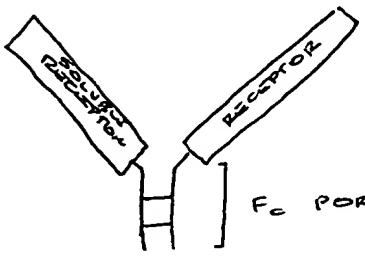
[redacted]: CONSTRUCTION PLAN IgG γ_1 VECTOR

PURPOSE: WILL BUILD A VECTOR FOR EXPRESSION OF SOLUBLE RECEPTORS FUSED TO IgG γ_1 HEAVY CHAIN. THIS EXPRESSION SYSTEM ALLOWS AN EASY WAY TO PURIFY SOLUBLE RECEPTOR OVER A PROTEIN A COLUMN & THEN PROVIDES A HANDLE FOR USING IN ASSAYS AFTER LIGAND.



- IgG PORTION OF FUSION INCLUDES HINGE REGIONS CH_2 & CH_3
- FUSION IS CONSTRUCTED AS A MONOMER BUT DIMERIZES VIA IT'S TWO CYSTEINE'S IN THE HINGE REGION

PLAN

5': GLU - PRO - LYS - SER - CYS - ASP - LYS - THR - HIS - THR ...

- LYS (1st A.ACID OF HINGE REGION) ← ARG
- CYS ← SER.

↳ LYS CHANGED TO ARGININE TO ALLOW CONSTRUCTION OF Bgl II SITE (FANSLOW, ET AL. J. OF IMMUNOLOGY 149: 655-660)

↳ CYS CHANGED TO SER JUN 15, 1992 TO ELIMINATE UNBOUND CYS IN HINGE REGION. THIS CYS NORMALLY BINDS LIGHT CHAIN, BUT LIGHT CHAIN IS NOT NECESSARY FOR CREATION OF A FUNCTIONAL FUSION (BENNETT, ET AL J. OF BIOL. CHEMISTRY 266 (34) 23060-23067 DEC 5, 1991)

3': WILL BE IDENTICAL TO MANU